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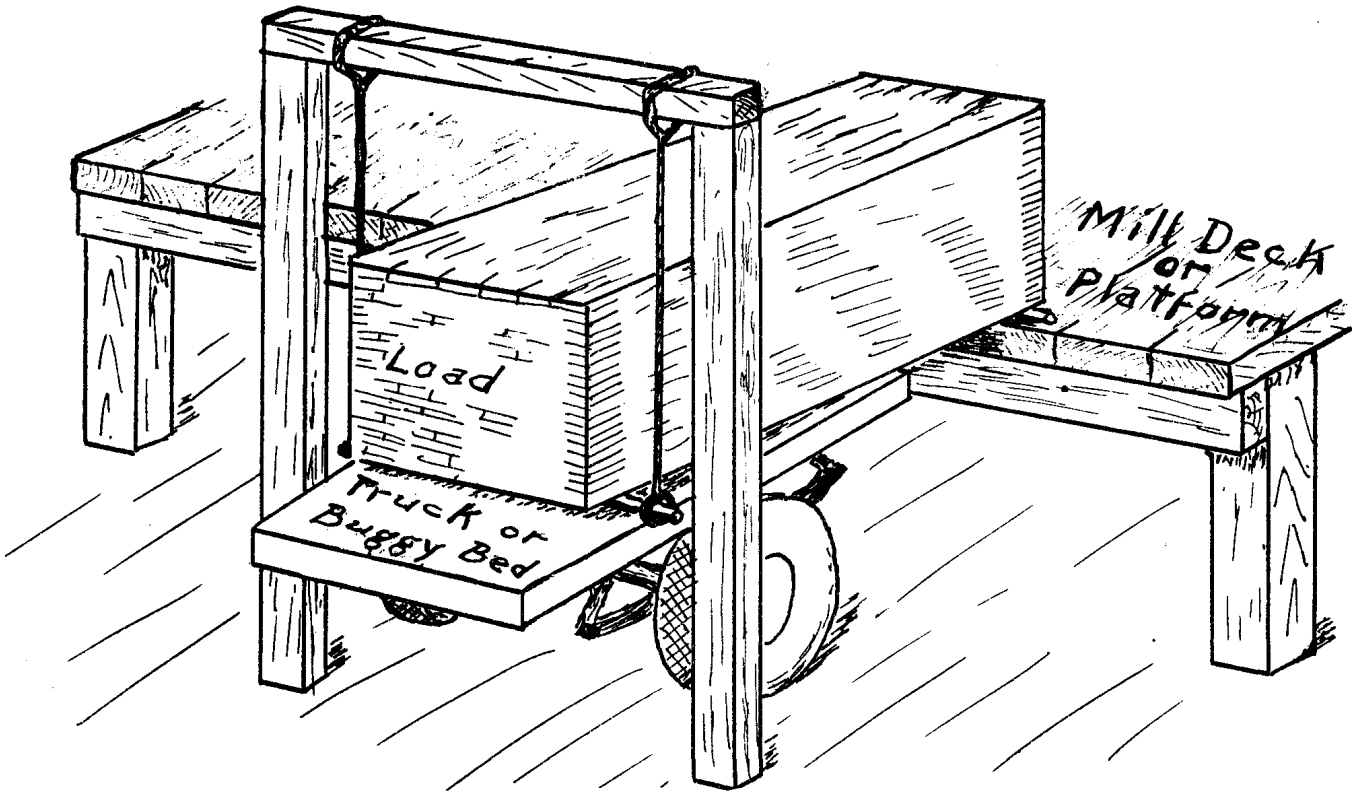
METHODS OF LOADING LUMBER AT THE REAR OF SMALL SAWMILLS

By Fred C. Simmons*

Small sawmills in the Northeast are usually set up to function quite efficiently in handling material from log deck to loading-out platform. The worst bottlenecks of production in many mills are now in the disposing of slabs and edgings, in piling the lumber as it comes off the edger, and in loading it out at the rear of the mill. There is no good reason that a small mill should be compelled to shut down operation two or three times a day while the entire crew is put to loading the accumulated lumber on a truck or buggy for transport to the railroad car or sticking yard. One man, assisted intermittently by the truck drivers, can easily keep abreast of the whole disposal job by using one of the simple devices hereafter described.

The Loading Sling



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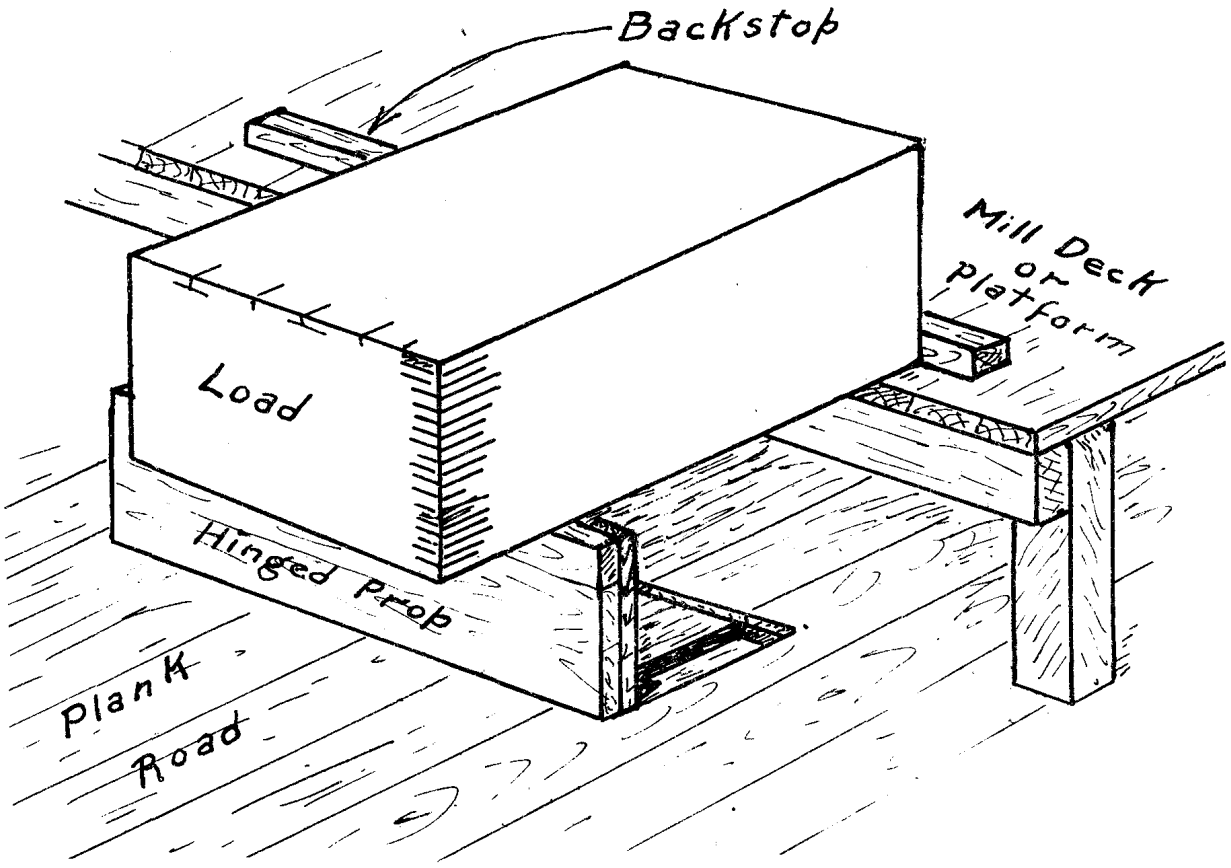
* Specialist on logging and milling, Division of Forest Utilization.

This method involves a support for the load which protrudes from the mill deck or sorting platform. It is adapted to mills producing round or square edged lumber in a limited number of lengths, thicknesses, and grades. The device shown in the sketch on page one is in use in several northeastern mills.

A sturdy scaffold is built of square timbers or poles about ten feet ahead of the mill deck or a sorting platform at the rear of the edger. From this scaffold are suspended two wire cables with rings in their lower ends through which is placed an iron pipe. This is arranged so that the pipe will be three or four inches above the truck or buggy bed when it is backed underneath. The road is so inclined, however, that when the rear of the truck or buggy bed approaches the platform it will engage the rear end of the load. Then the rings are knocked or pried away from the pipe and it falls down on the truck or buggy bed, the load is chained on and is sent on its way. The number of these rigs that can be erected at the rear of a mill is limited only by the distance that the sorter (usually the tail edgerman) can carry the boards. Three slings is a common number.

The Hinged-Prop Loader

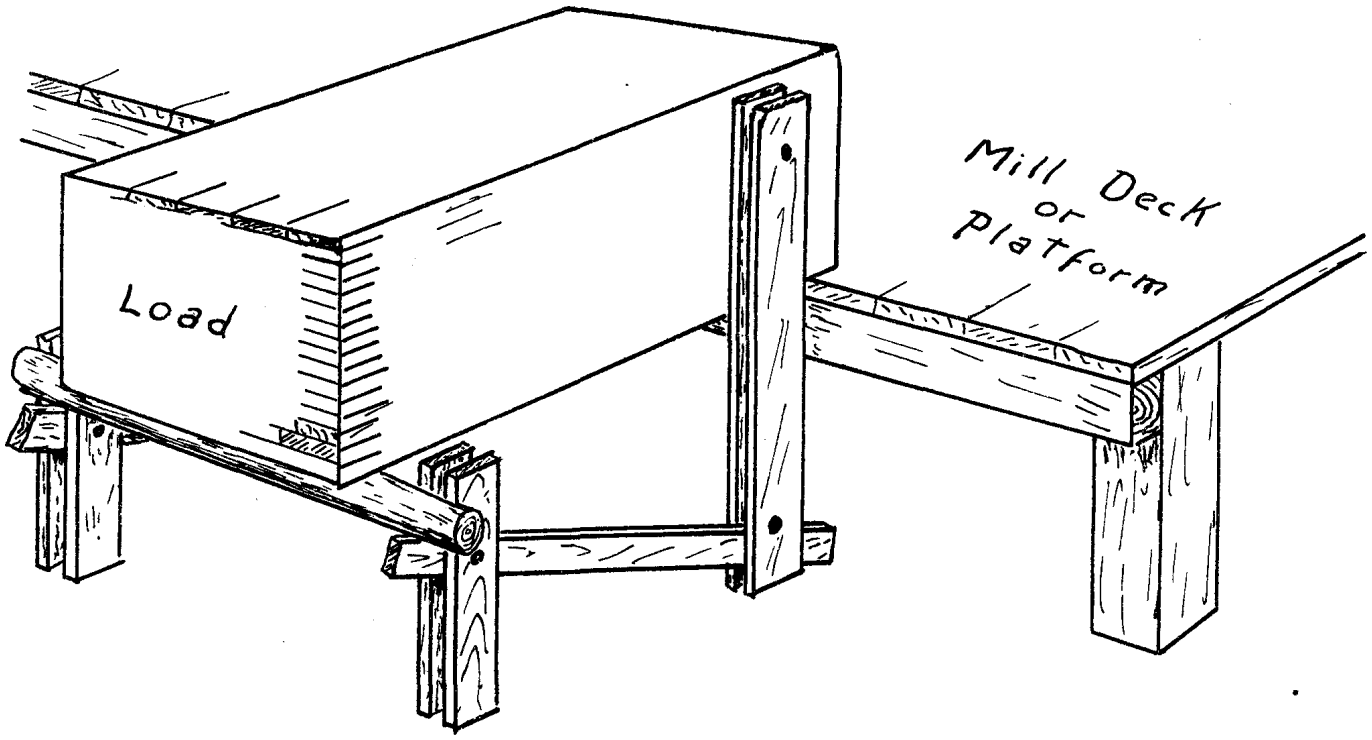
A variation of the sling device is the hinged-prop loader shown below:



In this case the front end of the pile is supported by a hinged prop, instead of a scaffold. The truck or buggy backs into the prop, and knocks it over into a recess which has been prepared to fit it in the plank road in front of the sorting platform. The conveyance continues backing over the knocked down prop until it hits the platform, with the load sliding onto its bed as it backs. It is a good idea to have the rear end of the truck equipped with a roller such as has been installed on their delivery trucks by many retail lumbermen in recent years to facilitate loading and unloading. When the load is on the bed, it is chained down, and the truck starts off again.

The Lever-Jack Loader

Still a third variation of the basic idea, suitable for heavier loads, is shown below.

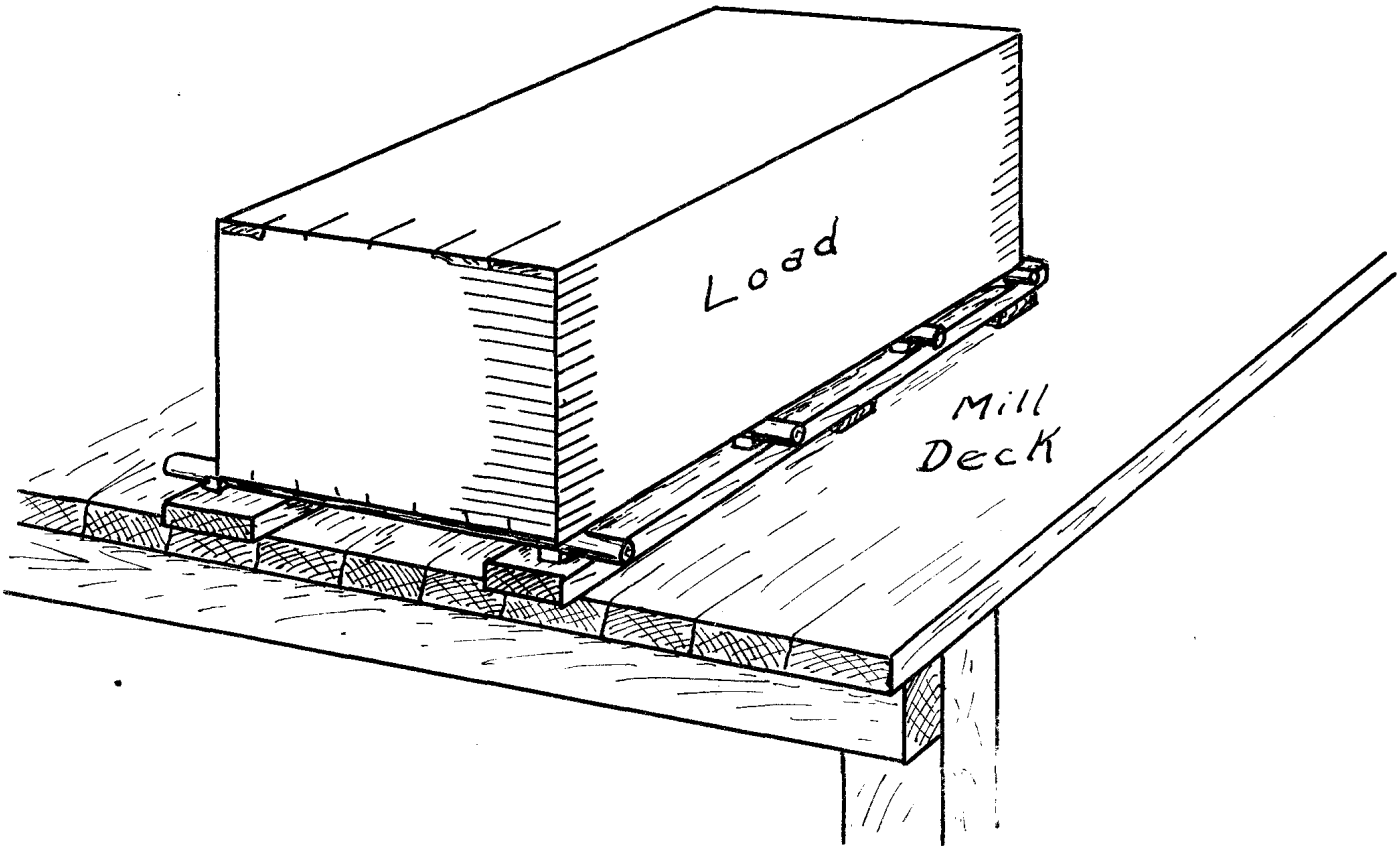


Here the front end of the load is supported by a round 6-inch log, or turned veneer core, at an angle above the sorting platform, which will allow the rear end of the truck or buggy to back under it and engage the load just in front of the platform. When this is done the two levers holding the ends of the log are let down by removing the 3/4-inch bolts holding down their rear ends, and easing them up to the bolt at the top of the rear post. This lowers the front end supported by the round roller. The pivots upon which these levers work are also 3/4-inch bolts through the top of the divided front posts. The log can be removed by turning it out with a short cant-hook. A 4 by 4 slipped between the load and the truck bed just behind it will ease the shock of the drop.

Many other variations of this general system of loading trucks are in use and will occur to ingenious sawmill men. Among them are the use of screw jacks under the front end of the load, or some sort of windlass arrangement.

The Loading Rollers

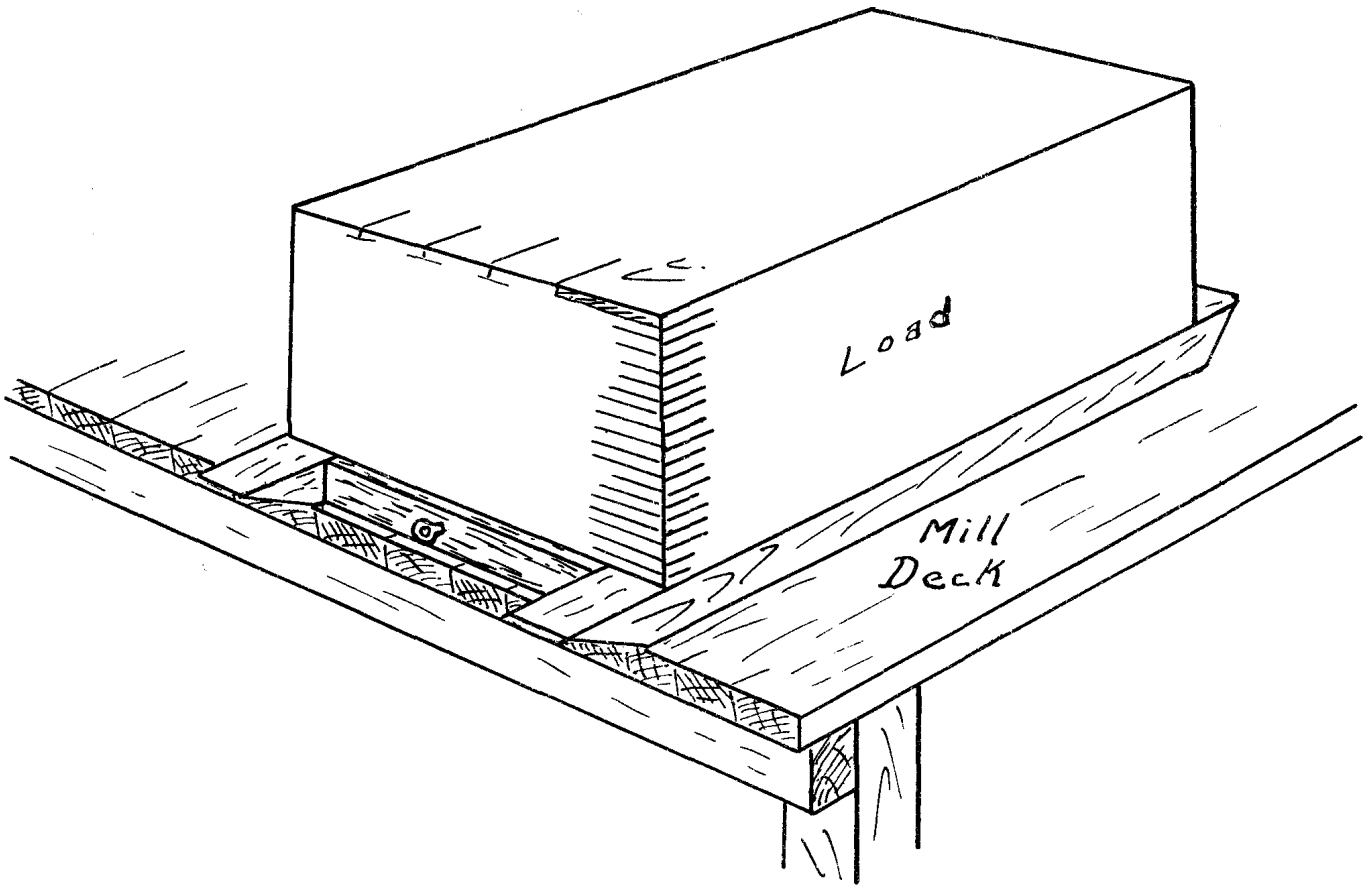
This method is adapted to off-the-ground mills where greater segregation of species or grades is practiced. Its simplest form, already in use at many northeastern mills, is illustrated below.



The load is piled on rollers on the platform itself. Three-inch water pipe has proved excellent for these rollers, and it is best if the platform is slightly inclined toward the loading out end. A slope of 1/2-inch in 10 feet is sufficient. Timbers as shown, under the rolls, are easy to block up to provide this incline, and much easier to keep clean than the deck itself. In this case some or all of the rollers will have to be blocked with wooden wedges. When the truck backs up to the platform the wedges are removed and the load will usually roll onto the truck bed by its own impetus. If it does not a big Stillson wrench can be used to start it on its way. If the truck is also equipped with rollers, and enough space is left between its rear end and the mill deck, the deck rollers will drop through and remain so that they can be used for the lext load.

The Loading Scoot

A variation of this last idea for use with trucks equipped with winches just behind the cab (like many telephone pole trucks) is illustrated below:



The loads are piled on sturdy scoots, made of squared timbers, with an eye bolt in one or both ends. When the truck backs up to the platform a hook in the end of the winch cable is attached to this eye and the scoot, with its load, is pulled onto the truck bed. If there is an eye in the other end, the scoot can be pulled off at the railroad siding platform or sticking yard. At one New England mill scoots of this type have been equipped with racks and are used for transportation of slabs to a nearby mill which uses them for fuel.

Many more elaborate devices are in successful use at larger mills but are beyond the scope of this note. At one mill short sections of track have been installed in the mill loading-out platform, and on the motor trucks. The lumber is loaded directly on the dry kiln trucks at the mill, the kiln truck is dragged onto the motor truck bed and chained down, and then hauled to the kilns a half mile away and hauled off onto the kiln tracks.

It is believed that these simple devices or variations of them, if put to more general use, would materially increase the production and reduce the manpower problems of many small northeastern mills.